## **IN THE ABSTRACT:**

[[In an]] An intracellular-reaction measuring apparatus for measuring intracellular reactions by the use of a specimen in which a plurality of cell colonies are contained in a non-contact state, the apparatus has i) includes specifying means in which the intensity of first light emitted from the specimen in accordance with the presence of a stated protein is detected to specify, of the plurality of cell colonies, a noted colony containing cells where the stated protein is present, and [[ii)]] selection means in which the intensity of second light emitted from the specimen in accordance with the intracellular reactions is detected to select, of the detected intensity of the second light, the intensity of the second light emitted from the noted colony. Also disclosed is an intracellular reaction measuring method making use of this apparatus.